

IN THE CLAIMS

Please amend the claims as follows:

1-2 (Canceled).

3. (Currently Amended): An optical scanner that scans a surface of each of a plurality of latent image carriers with a corresponding light beam, comprising:

a an optical deflection unit that is rotatable and that deflects and reflects light beams, the optical deflection unit having two or more surfaces, along an axis of rotation of optical deflection unit, that deflect and reflect the light beams in different directions;

a lens that takes-in the light beams reflected from the optical deflection unit and divides the light beams into a number of light beams equal to number of the image carrier; and

a bending optical system corresponding to each image carrier, the bending optical system configured to guide the light beam output from the lens onto a surface of a corresponding one of the image carriers, wherein

the light beams entering into the optical deflection unit include,

at least one orthogonal beam that is orthogonal to the axis of rotation of the optical deflection unit, and

at least one oblique beam that is oblique to a plane that is orthogonal to the axis of rotation of the optical deflection unit, and

wherein the oblique beam satisfies the condition:

$10 < 2L \cdot \tan \theta + d < 40$ (millimeters),

where θ is angle of incidence of the light beam with respect to the plane that is orthogonal to the axis of rotation of the optical deflection unit, d is distance between incident positions of the light beams, and L is a distance between the surfaces of the optical deflection unit and an image

surface.

4. (Previously Presented): The optical scanner according to claim 3, wherein the lens is a multi-tier lens obtained by stacking a plurality of lenses in a direction parallel to the axis of rotation of the optical deflection unit.

5. (Previously Presented): The optical scanner according to claim 3, wherein a bending optical system that is nearest to the lens includes a mirror that takes-in all the light beams output from the lens, reflects a light beam corresponding to the bending optical system that is nearest to the lens, and that is transparent to remaining light beams.

6. (Previously Presented): The optical scanner according to claim 3, wherein each bending optical system includes a mirror that takes-in light beams output from the lens for the bending optical systems that are at a later stage, reflects a light beam corresponding to the bending optical system in question, and that is transparent to light beams for the bending optical systems that are at the later stage.

7. (Previously Presented): The optical scanner according to claim 3, wherein each bending optical system includes a lens that is mounted so as to be eccentric by shifting or tilting in a vertical scanning direction.

8. (Previously Presented): The optical scanner according to claim 3, wherein each bending optical system includes a lens that has at least one eccentric surface tilted in a vertical scanning direction.

9. (Currently Amended): ~~The optical scanner~~ An image forming apparatus according to claim 3, further comprising an optical scanner according to claim 3, ~~that scans a surface of each of a plurality of latent image carriers with a corresponding light beam, wherein the optical deflection unit is the optical scanner including~~

a two-stage optical deflection unit that is rotatable and deflects and reflects light beams, the two-stage optical deflection unit having two ~~or more~~ surfaces, along an axis of rotation of optical deflection unit, that deflect and reflect the light beams in different directions;

~~a lens that takes in the light beams reflected from the optical deflection unit and divides the light beams into a number of light beams equal to number of the image carrier; and~~

~~a bending optical system corresponding to each image carrier, the bending optical system configured to guide the light beam output from the lens onto a surface of a corresponding one of the image carriers.~~

10. (Currently Amended): The image ~~formation~~ forming apparatus according to claim 9, wherein

three latent image carriers are provided corresponding to magenta, cyan, and yellow.

11. (Currently Amended): The image ~~formation~~ forming apparatus according to claim 9, wherein

four latent image carriers are provided corresponding to magenta, cyan, yellow, and black.

12. (Canceled).

13. (Previously Presented): The image forming apparatus according to claim 9, wherein the two-stage optical deflection unit comprises two polygonal mirrors separated from each other along the axis of rotation.

14. (Currently Amended): The optical scanner according to claim 3, wherein the optical deflection unit comprises a two-stage optical deflection unit that is rotatable and that deflects and reflects light beams, the two-stage optical deflection unit having two ~~or more~~ surfaces, along an axis of rotation of optical deflection unit, that deflect and reflect the light beams in different directions;

~~a lens that takes in the light beams reflected from the optical deflection unit and divides the light beams into a number of light beams equal to number of the image carrier; and~~

~~a bending optical system corresponding to each image carrier, the bending optical system configured to guide the light beam output from the lens onto a surface of a corresponding one of the image carriers.~~

15. (Currently Amended): The optical scanner according to claim 14, wherein the light beams entering into the two-stage optical deflection unit include:

at least one orthogonal beam that is orthogonal to the axis of rotation of the optical deflection unit, and

at least one oblique beam that is oblique to a plane that is orthogonal to the axis of rotation of the optical deflection unit.

16. (New): The optical scanner according to claim 14, wherein the two-stage optical deflection unit comprises two polygonal mirrors separated from each other along the axis of

Application No. 10/743,808

Supplemental Reply to Office Action of November 29, 2005 and further to the filing of
February 28, 2006

rotation.